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10/561,818

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Jacques Granger

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EXAMINER

SMALLEY, JAMES N

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,818	<b>Applicant(s)</b> GRANGER ET AL.	
	<b>Examiner</b> JAMES N. SMALLEY	<b>Art Unit</b> 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/21/2005</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

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## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Objections*

2. Claim 17 is objected to because of the following informalities: the number '1' in line 33 ("...a radial width 1 typically varying from...") should be in parenthesis if it is an element number shown in the figures; otherwise it should be deleted. Appropriate correction is required.

### *Claim Objections*

3. Claim 22 is objected to because of the following informalities: The claim requires an "and" before the phrase "a lower layer..." in line 4. Appropriate correction is required.

### *Drawings*

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **central core C, and lower layer I, of the seal (4) as claimed in claim 22**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the seal having a multilayer construction as claimed in claim 22** must be shown or the feature(s) canceled from the claim(s). Furthermore, **the height  $H_i$  of the insert being equal to at least the height  $H_c$  of the shell, as claimed in claim 26**, must be shown as well, or the feature cancelled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are further objected to for containing **myriad engineering measurements/markings**. Specifically, figures 1a, 1b, 1d and 6 contain engineering measurements which must be removed.

#### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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8. Claim 26 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not clear how the inner cap height  $H_i$  can be equal to at least the height  $H_c$  of the shell, since the shell completely surrounds (both radially, as well as axially) the inner shell. Examiner asserts the only way such a configuration could have equal heights would be if the outer shell was really just a ring, with an identical axial height to the inner shell's skirt.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 17-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17, from which the remaining claims depend, contains claim limitations which do not clearly state the features are part of the claimed invention, but instead use passive language to define the invention. Specifically, use of the term "typically" does not clearly state that the feature is part of the claimed invention. The term "may be chosen" is also indefinite, because it is not clear if such is required.

Examiner notes the following may not be a complete list of all instances in claim 17:

"...typically a bottle..." (line 2)

"...typically including..." (line 7)

"...typically made of..." (line 8)

"...typically forming..." (line 13)

"...typically varying from..." (line 28)

"...typically by..." (line 32)

"...typically varying from..." (line 33)

"...may be chosen..." (line 34)

"...typically with..." (line 37)

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“...typically an...” (line 48).

The term also appears in at least dependent claims 18, 19, 20, 22, 25, 28, 31, and 32. Examiner suggests the term be amended to state more clearly that the features are clearly part of the claimed invention.

- Claim 17 also uses the phrase “to a large extent” in line 21. It is not exactly clear what the metes and bounds of the term comprise. In other words, it is not clear if the seal and opening torque are completely independent of the axial position of the cap, or only partly independent.
- Claim 19, 22, 28, and 32 use the term “varies from/varying from.” Such is indefinite because it is not clear if the claimed thickness/density is to vary within a single cap, or, if it constant, depending on the desired size/density of a particular cap.
- Claim 20 is not clear because, by listing a first group of plastics (PS, PET, PA) and a second groups of plastics (PE or PP) linked together with “and,” it is not clear if only one plastic from the entire group is to be selected, or, if one from each group is to be selected in a blend.
- Claim 22, “...or possibly an oxygen barrier...” is indefinite because it is not clear if such is required for the claimed invention.
- Furthermore regarding claim 22, it is not clear how the lower level of the seal will be in contact with the liquid, as bottles are rarely, if ever, filled to the very top edge of the brim.
- Claim 29, “...may have a radius of curvature...” is indefinite because it's not clear if such is required for the claimed invention.
- Furthermore regarding claim 29 it is not clear how the radius RC of the shell can be at least 2 mm, while the previous claim limits it to be within a range of 0.5 mm to 5 mm.
- Furthermore regarding claim 29, it is not clear how the insert can have a radius equal to the shell. Examiner asserts if such was the case, the shell would not fit over the insert.

12. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the

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explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 28 recites the broad recitation "0.5 to 5 mm," and the claim also recites "1.5 or 2.5 mm" which is the narrower statement of the range/limitation. Claims 19 and 32 recite "0.1 mm to 1 mm" and also "0.15 mm to 0.5 mm."

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 17, 19, 23 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loffler et al. US 5,743,420 in view of Emery US 3,664,536.

**Examiner notes that because claim 17 claims specific structures as "radial compression means," beginning in line 23, the "means (6) of radially compressing the said seal (4)" of lines 16-17 does not invoke 35 U.S.C. 112, 6th paragraph as a proper means-plus-function limitation.**

Loffler '420 teaches, in the embodiment of figures 6-8 a closure cap taught to be formed of plastic, including an outer thread (27) on a container neck, an inner head (3), an inner skirt (5), inner thread (not shown, but inherently present, as the reference teaches in column 7, line 53, that the cap is to be screwed onto the container), a seal comprising a central part (53) and a peripheral part (55, 59), a means of radially compressing the seal in contact with the neck comprising a circular tab (9), which forms an overlap inclined at greater than 45 degrees to the vertical, as shown in the annotated figure 8 of Loffler

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'420, provided herein as separate attachment "Appendix A." The area immediately underneath the tab (9) is read to be the annular groove. Examiner again notes that while the figures fail to show threading, the reference is clear that the cap is to be threaded on a bottle, and thus there are inherently threads on the closure cap inner surface, which would form the lower bound of the groove.

The reference, as applied, teaches all limitations substantially as claimed, but fails to teach an outer shell.

Emery '536 teaches an outer shell comprising an outer head (34) and an outer skirt (36), and tamper evident means (38), to be applied over a threaded cap on a bottle neck. Examiner notes Loffler '420 is silent as to any tamper-evidencing. Thus, it would be desirable to provide means to indicate tampering with the container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the outer shell of Emery '536 to the closure cap of Loffler '420, motivated by the benefit of providing tamper evidencing.

Furthermore, Loffler '420, as modified, teaches all limitations substantially as claimed, but fails to teach the circular tab having an axial spacing from the inner head forming the bottom of the insert from 0.5 to 5 mm, or the circular tab having a radial width varying from 0.2 to 2.0 mm.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cap of Loffler '420, forming the forming the bottom of the insert from 0.5 to 5 mm, and forming the circular tab having a radial width varying from 0.2 to 2.0 mm, or to any other suitable size ranges, motivated by the benefit of configuring the cap to seal a like-sized container. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Furthermore, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 19, Loffler '420, as modified, teaches all limitations substantially as claimed, but fails to teach the thickness of the inner skirt being between 0.1 to 1 mm, or more specifically from 0.15 mm to 0.5 mm. It would have been obvious to one having ordinary skill in the art to form the thickness of



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the skirt to any suitable size, motivated by the benefit of fitting a given-sized container. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Furthermore, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 23, because the shell of Emery '536 is taught to completely surround the inner closure cap, such is read to have a larger height  $H_c$  than the insert  $H_i$ .

Regarding claim 26, Loffler '420, as modified above, teaches all limitations substantially as claimed, but fails to teach the height of the insert being equal to at least the height of the shell.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the shell of Loffler '420 as modified in view of Emery '536, forming it to be the same height as the inner shell, motivated by the benefit of reducing the amount of material used in construction of the closure.

Regarding claim 27, Emery '536 teaches tamper evident means in column 3, lines 36-45 comprising a weakening at juncture (39) to indicate tampering.

Regarding claims 28-29, Loffler '420, as modified, teaches all limitations substantially as claimed, but fails to teach the radius of curvature of the shell is between 0.5 and 5.0 mm, more specifically 1.5 mm to 2.5 mm, and the insert having a radius equal to  $R_C$ . It would have been obvious to one having ordinary skill in the art to form the shell and the insert to any suitable size, motivated by the benefit of fitting a given-sized container. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Furthermore, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claim 30, the overcap is read to be force-fit over the inner cap, as it is "fit" over the cap, and such requires forcing, including the force to put it in place, and the force to crimp onto the container neck.

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15. Claims 18 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loffler et al. US 5,743,420 in view of Emery US 3,664,536 as applied above to claim 17, and further in view of Stull US 4,651,886.

Regarding claim 18, Loffler '420 teaches all limitations substantially as claimed, but fails to teach retaining ribs disposed

Stull '886 teaches nibs (24, 30, 32) to retain a sealing disc within a closure cap. Examiner notes the term "typically" is read to be indefinite, and thus Examiner interprets the claim limitation of the ribs being disposed 120 degrees apart from each other as an example, and not a requirement.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure cap of Loffler '420, providing the nibs taught by Stull '886, motivated by the benefit of securing the sealing disc within the closure, before application onto a bottle.

Regarding claim 32, Loffler '420, as modified, teaches all limitations substantially as claimed, but fails to teach the thickness of the inner skirt being between 0.1 to 1 mm, or more specifically from 0.15 mm to 0.5 mm. It would have been obvious to one having ordinary skill in the art to form the thickness of the skirt to any suitable size, motivated by the benefit of fitting a given-sized container. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Furthermore, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

16. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loffler et al. US 5,743,420 in view of Emery US 3,664,536 as applied above to claim 17, and further in view of Morton US 5,259,522.

Loffler '420, as modified above, teaches all limitations substantially as claimed, but fails to teach the insert/inner cap being formed of thermoplastic comprising PS, PET, PA, PE, or PP.

Morton '522 teaches a closure cap with a deformable annular flange (32) for sealing a closure cap, teaching it is known to form such closure caps from polypropylene, in column 3, line 55.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure cap of Loffler '420, forming it of polypropylene, or any other suitable material for forming threaded closure caps which seal against the bottle rim onto which they are applied. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

17. Claims 21 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loffler et al. US 5,743,420 in view of Emery US 3,664,536 as applied above to claim 17, and further in view of Dautreppe et al. WO00/30948.

Examiner makes reference to US patent 7,210,592, which is the US patent for the same publication.

Loffler '420, as applied, teaches all limitations substantially as claimed, but fails to teach

Regarding claims 24, Dautreppe '592 teaches an overcapping cover which is to be crimped on bottles (as in the embodiment of figures 6a-6b), comprising an elongated skirt (4) and a tear strip defined by lines of weakness (43, 44). The problems solved section notes the covers play a decorative role in the appearance. The skirt is quite elongated, and appears it would be twice the length of the closure cap/inner cap of Loffler '420, were it to be applied to the container therein.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the bottle of Loffler '420, providing the cover taught by Dautreppe '948, motivated by the benefit of providing a decorative cover for appearance.

Thus, regarding claim 21, in column 7, lines 52-58, the reference teaches forming the shell of aluminum foil.

Regarding claim 25, the lines of weakness will both occur between Hi and Hc, at the very least the upper line of weakness (43).

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18. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loffler et al. US 5,743,420 in view of Emery US 3,664,536 as applied above to claim 17, and further in view of Obadia US 4,785,952.

Loffler '420, as applied, teaches all limitations substantially as claimed, but fails to teach the liner having a compressible core with a density of between 200 to 500 kg/cubic meter, and an oxygen barrier exposed to the container contents.

Obadia '952 teaches a sealing liner, comprising oxygen-impervious PVC (8) which is exposed to the container contents, and a rubber layer (7). Examiner provides herein a list of material densities, obtained online at <http://www.simetric.co.uk>, which lists the density of ground scrap rubber as 481 kg/cubic meter.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sealing liner of Loffler '420, forming it of the same construction as the liner of Obadia '952, motivated by the benefit of providing an oxygen barrier to preserve the container contents.

19. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loffler et al. US 5,743,420 in view of Emery US 3,664,536 as applied above to claim 17, and further in view of Christmas et al. US 5,971,179.

Loffler '420, as applied above, teaches all limitations substantially as claimed, but fails to teach a complementary element.

Christmas '179 teaches a non-refilling device for insertion into a bottle neck, to prevent refilling of the container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the bottle of Loffler '420, providing the non-refilling element taught by Christmas '179, motivated by the benefit of preventing refilling of the container.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES N. SMALLEY whose telephone number is (571)272-4547. The examiner can normally be reached on Monday - Friday 10 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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